



Mineral Industry Surveys

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SULFUR IN JUNE 2003

During the month, production of recovered elemental sulfur was 687,000 metric tons, according to the U.S. Geological Survey (USGS). June production was 10% lower than May 2003, and virtually the same as that of June 2002. Shipments were 11% lower than those of May 2003. Producers' ending stocks for June 2003 were 189,000 tons.

Import and export data for June 2003 were not available at the time of publication and will be published in the Sulfur in July 2003 Mineral Industry Surveys along with apparent consumption. Imports of recovered sulfur for May 2003 were

estimated to be 246,000 tons; exports were 41,000 tons. Imports of sulfuric acid for May 2003 were 75,000 tons; exports were 22,000 tons.

Significant adjustments have been made to the sulfur import data. Reports from the U.S. Census Bureau appear to underreport sulfur imports, especially material from Canada. The revised figures are based on Census information, data from other published sources, and personal communications with industry experts. Better strategies for estimating import data from Canada are being explored.

TABLE 1
SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources
	Petroleum ²	Natural gas	Total	
2002:				
January-December	6,750	1,760	8,500	8,490
January-June ^r	3,310	867	4,180	4,190
June	553	132	685	680
July	565	146	711	715
August	589	125	714	725
September	543	132	675	659
October	545	164	708	699
November	579	155	733	747
December	611	168	779	755
2003:				
January	603	169	772	768
February	528	148	676	660
March	598	160	758	739
April	625	166	791	807
May ^r	624	141	765	761
June ^p	562	124	687	677
Total	3,540	909	4,450	4,410

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes a small quantity from coking operations.

TABLE 2
U.S. IMPORTS OF SULFUR¹

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries ²	
	Quantity ^e	Value ³	Quantity	Value ³	Quantity ^e	Value ³
2002:						
January-December	1,950 ^r	9,450	430	11,300	2,560 ^r	26,800
January-May	690 ^r	2,850	178	3,450	919 ^r	8,110
May	180 ^r	409	44	1,100	233 ^r	1,730
June	180 ^r	106	30	774	210 ^r	1,270
July	180 ^r	405	44	1,140	242 ^r	1,960
August	180 ^r	1,860	30	944	223 ^r	3,240
September	180 ^r	1,050	45	1,420	242 ^r	3,010
October	180 ^r	1,240	29	944	247 ^r	3,290
November	180 ^r	843	29	942	232 ^r	2,230
December	180 ^r	1,100	45	1,640	252 ^r	3,720
2003:						
January	180 ^r	1,280	44	2,460	224 ^r	3,740
February	180 ^r	2,330	45	1,850	225 ^r	4,250
March	180 ^r	2,870	45	2,130	225 ^r	5,660
April ^f	180 ^r	2,950	44	2,380	224 ^r	5,230
May	180	4,160	45	2,530	246	7,760
Total	900	13,600	223	11,400	1,140	26,600

^eEstimated. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other countries not listed.

³Declared customs valuation.

Source: U.S. Census Bureau; as adjusted by U.S. Geological Survey.

TABLE 3
U.S. IMPORTS OF SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total, all countries ²		
	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³
2002:									
January-December	615	201	17,900	217	71	3,750	1,060	344	36,400
January-May	319	104	8,990	76	25	603	523	168	16,100
May	50	16	1,750	17	6	219	67	22	2,080
June	70	23	1,770	12	4	254	83	27	2,460
July	37	12	1,300	21	7	541	61	20	2,520
August	22	7	878	22	7	224	51	17	5,430
September	37	12	1,130	19	6	319	59	19	2,120
October	33	11	1,170	9	3	255	47	15	2,110
November	51	17	1,390	28	9	1,010	93	31	3,080
December	45	15	1,310	30	10	548	142	47	2,590
2003:									
January	38	13	1,330	29	9	511	67	22	1,900
February	30	10	1,080	25	8	836	57	19	2,360
March	42	14	1,740	19	6	279	63	21	2,480
April [†]	44	14	1,680	--	--	--	54	18	2,200
May	34	11	1,320	29	10	638	75	25	2,710
Total	188	62	7,140	102	33	2,260	316	105	11,600

[†]Revised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other countries not listed.

³Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value ²	Quantity	Sulfur content	Value ²
2002:					
January-December	555	40,000	148	49	12,800
January-May	157 [†]	13,800 [†]	58	19	4,640
May	8	1,980	13	4	1,070
June	127	6,650	13	4	1,100
July	2	189	12	4	887
August	49	1,340	15	5	1,230
September	70	6,920	16	5	1,840
October	76	3,450	11	4	1,040
November	60	2,400	9	3	839
December	14	5,300	14	5	1,190
2003:					
January	107	3,440	12	4	1,380
February	63	3,410	16	5	1,150
March	31	2,020	11	3	1,360
April [†]	90	2,910	12	4	1,430
May	41	2,430	22	7	1,610
Total	332	14,200	73	23	6,930

[†]Revised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5
U.S. CONSUMPTION OF SULFUR¹

(Thousand metric tons)

Period	Domestic sources ²	Imports ^e	Consumption
2002:			
January-December	7,930	2,560 ^r	10,500 ^r
January-May ^r	6,730	919 ^r	7,650 ^r
May	749	233 ^r	982 ^r
June	553	210 ^r	763 ^r
July	713	242 ^r	955 ^r
August	676	223 ^r	899 ^r
September	589	242 ^r	831 ^r
October	623	247 ^r	870 ^r
November	687	232 ^r	919 ^r
December	741	252 ^r	993 ^r
2003:			
January	661	224 ^r	885 ^r
February	597	225 ^r	822 ^r
March	708	225 ^r	933 ^r
April ^r	717	224 ^r	941 ^r
May	720	246	966
Total	3,400	1,140	4,550

^eEstimated. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT¹

(Thousand metric tons)

District and source	June 2003 ^p		May 2003		Total 2003 ²		Year to date 2002 ²	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	19	18	13 ^r	13 ^r	107	106	127 ^r	129 ^r
Natural gas	2	2	2	2	13	13	14 ^r	14 ^r
Total	21	20	16 ^r	15 ^r	120	119	142	144
PAD 2:								
Petroleum and coke	80	80	79	79	456	449	398 ^r	398 ^r
Natural gas	4	4	4	3	21	21	25 ^r	24
Total	84	84	82	82	477	470	423 ^r	422 ^r
PAD 3: ³								
Petroleum and coke	351	354	415 ^r	416 ^r	2,270	2,270	2,220 ^r	2,230 ^r
Natural gas	31	31	40	40	206	206	218 ^r	220 ^r
Total	382	384	455 ^r	456 ^r	2,470	2,480	2,430	2,450
PAD 4 and 5: ⁴								
Petroleum and coke	112	111	117	102	712	686	571 ^r	569 ^r
Natural gas	87	79	95 ^r	106 ^r	668	657	610 ^r	609 ^r
California	88	86	94	80	569	551	458	455
Total	200	190	212 ^r	208 ^r	1,380	1,340	1,180 ^r	1,180 ^r
Grand total	687	677	765 ^r	761 ^r	4,450	4,410	4,180 ^r	4,190 ^r

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to prior months.

³Includes the U.S. Virgin Islands.

⁴Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS¹

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	2003			2002
	June	May	Year to date	total
Production	8.36 ^p	9.01 ^r	8.97	8.50
Shipments	8.24 ^p	8.96 ^r	8.90	8.49
Exports of sulfur	NA	0.48	0.80	0.56
Imports of sulfur:				
Canada	NA	2.12 ^e	2.18 ^e	1.95 ^r
Mexico	NA	0.53	0.54	0.43
Total ²	NA	2.90 ^e	2.76 ^e	2.56 ^r
Export of H ₂ SO ₄	NA	0.26	0.18	0.15
Import of H ₂ SO ₄ :				
Canada	NA	0.40	0.45	0.62
Europe	NA	0.34	0.25	0.22
Total ²	NA	0.88	0.76	1.06
Consumption: ³				
Domestic sources	NA	8.48	8.23	7.93
Imports	NA	2.90 ^e	2.76 ^e	2.56 ^r
Total	NA	11.40	11.00	10.50 ^r
Sulfur export values ⁴	NA	\$59	\$43	\$72
Sulfur import values: ⁴				
Canada	NA	\$23	\$15	\$5 ^r
Mexico	NA	\$56	\$51	\$26
Average	NA	\$32	\$23	\$10 ^r
H ₂ SO ₄ export values ⁴	NA	\$73	\$95	\$86
H ₂ SO ₄ import values: ⁴				
Canada	NA	\$39	\$38	\$29
Europe	NA	\$22	\$22	\$17
Average	NA	\$36	\$37	\$34

^eEstimated. ^pPreliminary. ^rRevised. NA Not available.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes other countries not listed.

³Because June trade data were not available, June consumption was not determined.

⁴Average value per ton for most recent data available.